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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary****Application No.**

09/818,052

**Applicant(s)**

REYNOLDS ET AL.

**Examiner**

CHRIS PARRY

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**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 February 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-52 and 56 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-52 and 56 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/C2)
- Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 25 February 2008 has been entered.

### ***Response to Arguments***

2. Applicant's arguments with respect to claims 1-52 and 56 have been considered but are moot in view of the new ground(s) of rejection.
3. Applicant's failure to adequately traverse the Examiner's taking of Official Notice in the last Office Action is taken as an admission of the fact(s) noticed.

### ***Specification***

4. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: The specification fails to provide support for computer-readable medium recited in claim 43.

***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claim 3 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 3 recites “The data modification device as set forth in claim **2**, wherein the substitution determination parameter comprises a geographic region identifier parameter”; however the specification does not provide support for the “substitution determination parameter” to comprise both a multi-level priority parameter and a geographic region identifier. Paragraphs 0029-0032 of the written specification only provides support for the substitution parameter to be A, B, or B not A, B, and C.

For purposes of an art rejection, claim 3 will be treated as being dependent upon claim 1.

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 8-12, 38, 41, 42, and 56 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
9. Claim 8 recites the limitation "the broadcasting source" in line 2 of claim 8. There is insufficient antecedent basis for this limitation in the claim.
10. Claim 9 recites the limitation "the broadcasting source" in line 2 of claim 9. There is insufficient antecedent basis for this limitation in the claim.
11. Claim 10 recites the limitation "the broadcasting source" in line 2 of claim 10. There is insufficient antecedent basis for this limitation in the claim.
12. Claim 11 recites the limitation "the broadcasting source" in line 2 of claim 11. There is insufficient antecedent basis for this limitation in the claim.
13. Claim 12 recites the limitation "the broadcasting source" in line 2 of claim 12. There is insufficient antecedent basis for this limitation in the claim.
14. Claim 38 recites the limitation "the comparison" in the last line of claim 38. There is insufficient antecedent basis for this limitation in the claim.
15. Claim 41 recites the limitation "the processor" in line 10 of claim 41. There is insufficient antecedent basis for this limitation in the claim.
16. Claim 42 recites the limitation "said data signal" in line 8 of claim 42. There is insufficient antecedent basis for this limitation in the claim.
17. Claim 56 is rejected under 35 U.S.C. 112, second paragraph, as being vague and indefinite as on page 19, line 13 of the claims, claim 56 recites "a second inserter coupled to the second processor component...", however it is unclear how the claimed

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second inserter located at the second distribution point is coupled to the second processor component located at the first distribution point. Therefore the second inserter cannot be coupled to the second processor component because each component is located a different distribution point. For purposes of an art rejection, the examiner will assume the second inserter is coupled to the fourth processor.

### ***Claim Rejections - 35 USC § 102***

18. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

19. Claims 1-3, 14, 17-19, 22, 23, 25, 27-33, 37-50, and 56 are rejected under 35 U.S.C. 102(e) as being anticipated by Del Sesto et al. "Del Sesto" (US Pub. No. 2007/0130581 A1).

Regarding Claim 1, Del Sesto discloses a data modification device, said data modification device comprising:

a data modification unit (local broadcast subsystem 628 – figure 6) coupled to an incoming data terminal (receiver 612 – figure 6), a local data terminal (interactive broadcast server 606 - figure 6), and a data distribution terminal (transmission facilities 620 – figure 6), wherein the data modification unit is adapted to selectively combine

data from the incoming data terminal [612] and the local data terminal [644] in accordance with an instruction set (§ 0049);

a data stripper (604 – figure 6, § 0049) for extracting meta data parameters (i.e., interactive conditional code 303 – figure 3) from a data signal (combined television-interactive code signal 601 sent from broadcast facility to local broadcast subsystem 628) wherein the extracted meta data parameters [303] include a substitution determination parameter (OPT field 308 – figure 3, § 0045), said substitution determination parameter specifying conditions (i.e., whether the content or “meta data” should be blocked, passed through, or replaced as set forth by interactive content preparer) when a subset of original broadcast meta data in said data signal should be replaced (§ 0045 and 0058);

an evaluator (606 – figure 6; § 0049) for evaluating the substitution determination parameter [308] with respect to a local state (i.e., server 606 determines whether the subsystem 628 requires an application to be blocked § 0060 & 0062) of said modification device [628] (§ 0062-0065 and 0056-0058); and

an inserter (608 – figure 6; § 0049) for substituting said subset of original broadcast meta data (i.e., interactive content) in the data signal with local meta data (i.e., interactive content more suited to the demographics of local subsystem 628; § 0057) based on the evaluator [606] comparison (§ 0049 & 0065).

As for Claim 2, Del Sesto teaches wherein the substitution determination parameter [308] comprises a multi-level priority parameter (i.e., whether the content should be blocked, passed through, or replaced) (§ 0045).

As for Claim 3, Del Sesto teaches wherein the substitution determination parameter [308] comprises a geographic region identifier parameter (i.e., broadcast server 608 inserts a custom interactive content into the video signal 607 based on a determination of custom content broadcast suited to the demographics of the local subsystem 628) (§ 0057).

As for Claim 14, Del Sesto teaches wherein the local data terminal [606] is adapted to receive a data signal from a storage device [644] (§ 0065).

As for Claim 17, Del Sesto teaches wherein the storage device is a computer database (§ 0065).

As for Claim 18, Del Sesto teaches wherein the data distribution terminal is adapted to transmit a data signal to a distribution channel (§ 0049 and 0061).

As for Claim 19, Del Sesto fails to disclose wherein the data striper [604] is adapted to separate an incoming signal into a video data component and a meta data component (§ 0049).



As for Claim 22, Del Sesto teaches the data modification device as set forth in claim 1, further comprising a receiver (CPE 648 – figure 6) adapted to display the combined data from the incoming data terminal and the local data terminal (§ 0047 and 0029).

As for Claim 23, Del Sesto teaches wherein the receiver is an NTSC enabled television (§ 0047 and 0029).

As for Claim 25, Del Sesto teaches wherein the receiver is an MPEG2 enabled television (§ 0047, 0051, and 0029).

As for Claim 27, Del Sesto teaches wherein the receiver is a DBS enabled television (i.e., satellite receiver system) (§ 0047).

Regarding Claim 28, Del Sesto discloses a data modification system for selective insertion of local meta data into an incoming data stream, the incoming data stream having a video data component and a meta data component, the data modification system comprising:

a data modification unit (local broadcast subsystem 628 – figure 6) coupled to an incoming data terminal (receiver 612 – figure 6) and a local data terminal (interactive broadcast server 606 - figure 6), wherein the data modification unit is adapted to

selectively combine data from the incoming data terminal [612] and the local data terminal [644] (§ 0049);

a data stripper (604 – figure 6, § 0049) for extracting meta data parameters (i.e., interactive conditional code 303 – figure 3) from the incoming data stream (combined television-interactive code signal 601 sent from broadcast facility to local broadcast subsystem 628) wherein the extracted meta data parameters [303] include a substitution determination parameter (OPT field 308 – figure 3, § 0045), said substitution determination parameter specifying conditions (i.e., whether the content or “meta data” should be blocked, passed through, or replaced as set forth by interactive content preparer) when a subset of original broadcast meta data in said incoming data stream should be replaced (§ 0045 and 0058);

an evaluator (606 – figure 6; § 0049) for evaluating the substitution determination parameter [308] with respect to a local state (i.e., server 606 determines whether the subsystem 628 requires an application to be blocked § 0060 & 0062) of said data modification system [628] (§ 0062-0065 and 0056-0058); and

an inserter (608 – figure 6; § 0049) for substituting said subset of original broadcast meta data (i.e., interactive content) in the incoming data stream with local meta data (i.e., interactive content more suited to the demographics of local subsystem 628; § 0057) based on the evaluator [606] comparison (§ 0049 & 0065).

As for Claim 29, Del Sesto teaches wherein the substitution determination parameter [308] comprises a multi-level priority parameter (i.e., whether the content should be blocked, passed through, or replaced) (¶ 0045).

As for Claim 30, Del Sesto teaches wherein the substitution determination parameter [308] comprises a geographic region identifier parameter (i.e., broadcast server 608 inserts a custom interactive content into the video signal 607 based on a determination of custom content broadcast suited to the demographics of the local subsystem 628) (¶ 0057).

Regarding Claim 31, Del Sesto discloses a method of selectively modifying a data signal, said method comprising:

receiving a data signal (601 – figure 6), the data signal comprising a first data component (television signal) and a second data component (interactive content and interactive conditional code) (¶ 0047);

separating the first data component from the second data component (i.e., detector 604 detects the interactive content code 300 and provides the code 300 to server 606) (¶ 0049);

extracting meta data parameters (i.e., interactive conditional code 303 – figure 3) from the data signal (combined television-interactive code signal 601 sent from broadcast facility to local broadcast subsystem 628) wherein the extracted meta data parameters [303] include a substitution determination parameter (OPT field 308 – figure

3, ¶ 0045), said substitution determination parameter specifying conditions (i.e., whether the content or “meta data” should be blocked, passed through, or replaced as set forth by interactive content preparer) when a subset of said second data component in said data signal should be replaced (¶ 0045 and 0058);

determining whether to replace a subset of the second data component by evaluating the extracted substitution determination parameter (¶ 0056-0058) with respect to a local state (i.e., server 606 determines whether the subsystem 628 requires an application to be blocked or whether to replace or pass through the interactive content ¶ 0060 & 0062-0065);

retrieving a third data component (local interactive content from database 644) from a database (644 – figure 6), wherein the third data component includes local meta data from a local meta data center (¶ 0065);

replacing a subset of said second data component with the third data component based on the evaluation (¶ 0049 & 0065).

As for Claim 32, Del Sesto teaches wherein the substitution determination parameter [308] comprises a multi-level priority parameter (i.e., whether the content should be blocked, passed through, or replaced) (¶ 0045).

As for Claim 33, Del Sesto teaches wherein the substitution determination parameter [308] comprises a geographic region identifier parameter (i.e., broadcast server 608 inserts a custom interactive content into the video signal 607 based on a

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determination of custom content broadcast suited to the demographics of the local subsystem 628) (¶ 0057).

As for Claim 37, Del Sesto teaches where the first data component comprises video (¶ 0047).

Regarding Claim 38, Del Sesto discloses a method of selectively modifying a data signal, comprising:

receiving a data signal (601 – figure 6), the data signal comprising a first data component (television signal) and a second data component (interactive content and interactive conditional code) (¶ 0047);

separating the first data component from the second data component (i.e., detector 604 detects the interactive content code 300 and provides the code 300 to server 606) (¶ 0049) further comprises meta data parameters (i.e., interactive conditional code 303 – figure 3) and wherein the meta data parameters [303] include a substitution determination parameter (OPT field 308 – figure 3, ¶ 0045), said substitution determination parameter specifying conditions (i.e., whether the content or “meta data” should be blocked, passed through, or replaced as set forth by interactive content preparer) when a subset of the second data component in said data signal should be replaced (¶ 0045 and 0058);

determining whether to replace a subset of the second data component by evaluating the substitution determination parameter (¶ 0056-0058) with respect to a

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local state (i.e., server 606 determines whether the subsystem 628 requires an application to be blocked or whether to replace or pass through the interactive content ¶ 0060 & 0062-0065);

if replacement of said subset of the second data component is not required then forwarding the second data component (i.e., interactive content preparer specifies the content not be replaced using OPT field 308) (¶ 0045 and 0058), and

merging the forward second data component with the first data component (i.e., passing the signal through data insertion unit 608 unchanged and sending merged signal 609 to transmission facilities 620 unchanged) (¶ 0058, 0060, and 0064); and

if replacement of said subset of the second data component is required then

retrieving a third data component from a database (local interactive content from database 644), wherein the third data component includes local meta data from a local meta data center (i.e., retrieving a local customized application that is designed for the geographic viewership) (¶ 0065 and 0057)

forwarding the third data component (figure 6; ¶ 0061 and 0065);

replacing a subset of said second data component with the third data component based on the comparison (¶ 0049 and 0065).

As for Claim 39, Del Sesto teaches wherein the substitution determination parameter [308] comprises a multi-level priority parameter (i.e., whether the content

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should be blocked, passed through, or replaced) and said local state comprises a local priority parameter (§ 0045).

As for Claim 40, Del Sesto teaches wherein the substitution determination parameter [308] comprises a geographic region identifier parameter (i.e., broadcast server 608 inserts a custom interactive content into the video signal 607 based on a determination of custom content broadcast suited to the demographics of the local subsystem 628) said local state comprises a geographic identifier (§ 0057 and 0045).

Regarding Claim 41, Del Sesto discloses a data modification system (628 – figure 6) for selective insertion of local meta data into a data stream, the data stream having a video data component and a meta data component, the data modification system comprising:

a data stripper (604 – figure 6, § 0049) for extracting meta data parameters (i.e., interactive conditional code 303 – figure 3) from the data stream (combined television-interactive code signal 601 sent from broadcast facility to local broadcast subsystem 628) wherein the extracted meta data parameters [303] include a substitution determination parameter (OPT field 308 – figure 3, § 0045), said substitution determination parameter specifying conditions (i.e., whether the content or “meta data” should be blocked, passed through, or replaced as set forth by interactive content preparer) when a subset of meta data component in said data stream should be replaced (§ 0045 and 0058);

a data storage device for storing local meta data (644 - figure 6) (¶ 0065);  
the processor (606 – figure 6; ¶ 0049) coupled to the data storage device [644]  
and the data stripper [604], the processor for evaluating the extracted substitution  
determination parameter [308] with respect to a local state (i.e., server 606 determines  
whether the subsystem 628 requires an application to be blocked ¶ 0060 & 0062) of  
said data modification system [628] (¶ 0062-0065 and 0056-0058); and  
a data insertion unit (608 – figure 6; ¶ 0049) coupled to the processor [606], the  
data insertion unit for replacing said subset of meta data component (i.e., interactive  
content) with local meta data (i.e., interactive content more suited to the demographics  
of local subsystem 628; ¶ 0057) based on the evaluation (¶ 0049 & 0065).

Regarding Claim 42, Del Sesto discloses a data modification system (628 –  
figure 6) for selective insertion of local meta data into a data stream, the data stream  
having a video data component and a meta data component, the data modification  
system comprising:

means for extracting (604 – figure 6, ¶ 0049) meta data parameters (i.e.,  
interactive conditional code 303 – figure 3) from the data stream (combined television-  
interactive code signal 601 sent from broadcast facility to local broadcast subsystem  
628) wherein the extracted meta data parameters [303] include a substitution  
determination parameter (OPT field 308 – figure 3, ¶ 0045), said substitution  
determination parameter specifying conditions (i.e., whether the content or “meta data”  
should be blocked, passed through, or replaced as set forth by interactive content



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preparer) when a subset of original broadcast meta data in said data signal should be replaced (§ 0045 and 0058);

means for storing the local meta data (644 - figure 6) (§ 0065);

means for evaluating (606 – figure 6; § 0049) the extracted substitution determination parameter [308] with respect to a local state (i.e., server 606 determines whether the subsystem 628 requires an application to be blocked § 0060 & 0062) of said data modification system [628] (§ 0062-0065 and 0056-0058); and

means for replacing (608 – figure 6; § 0049) said subset of original broadcast meta data (i.e., interactive content) with local meta data (i.e., interactive content more suited to the demographics of local subsystem 628; § 0057) based on the evaluation of the extracted substitution determination parameter (§ 0049 & 0065).

Regarding Claim 43, Del Sesto discloses a computer-readable medium having computer executable instructions for performing a method of selectively modifying a data signal, the method comprising:

receiving a data signal (601 – figure 6), the data signal comprising a first data component (television signal) and a second data component (interactive content and interactive conditional code) (§ 0047);

separating the first data component from the second data component (i.e., detector 604 detects the interactive content code 300 and provides the code 300 to server 606) (§ 0049);

extracting meta data parameters (i.e., interactive conditional code 303 – figure 3) from second data component wherein the extracted meta data parameters [303] include a substitution determination parameter (OPT field 308 – figure 3, ¶ 0045), said substitution determination parameter specifying conditions (i.e., whether the content or “meta data” should be blocked, passed through, or replaced as set forth by interactive content preparer) when a subset of the second data component in said data signal should be replaced (¶ 0045 and 0058);

determining whether to replace a subset of the second data component by evaluating the extracted substitution determination parameter (¶ 0056-0058) with respect to a local state (i.e., server 606 determines whether the subsystem 628 requires an application to be blocked or whether to replace or pass through the interactive content ¶ 0060 & 0062-0065);

if replacement of said subset of the second data component is not required then

forwarding the second data component (i.e., interactive content preparer specifies the content not be replaced using OPT field 308) (¶ 0045 and 0058),

merging the forward second data component with the first data component (i.e., passing the signal through data insertion unit 608 unchanged and sending merged signal 609 to transmission facilities 620 unchanged) (¶ 0058, 0060, and 0064); and

if replacement of said subset of the second data component is required then

retrieving a third data component from a database (local interactive content from database 644), wherein the third data component includes local

meta data from a local meta data center (i.e., retrieving a local customized application that is designed for the geographic viewership) (§ 0065 and 0057)  
forwarding the third data component (figure 6; § 0061 and 0065);  
replacing a subset of said second data component with the third data component based on the evaluation (§ 0049 and 0065).

Regarding Claim 44, Del Sesto discloses a method of controlling a display of enhanced television content for viewers from a distribution point comprising:

receiving a broadcast signal (601 – figure 6) comprising a video component (television signal) and a generic meta data component (interactive content and interactive conditional code), the generic meta data component comprising triggers (interactive content codes) and broadcast meta data (interactive content) (§ 0047);

extracting meta data parameters (i.e., interactive conditional code 303 – figure 3) from the generic meta data component (combined television-interactive code signal 601 sent from broadcast facility to local broadcast subsystem 628) wherein the extracted meta data parameters [303] include a substitution determination parameter (OPT field 308 – figure 3, § 0045), said substitution determination parameter specifying conditions (i.e., whether the content or “meta data” should be blocked, passed through, or replaced as set forth by interactive content preparer) when a subset of said broadcast meta data component in said broadcast signal should be replaced (§ 0045 and 0058);

evaluating the substitution determination parameter (§ 0056-0058) with respect to a local state (i.e., server 606 determines whether the subsystem 628 requires an

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application to be blocked or whether to replace or pass through the interactive content ¶ 0060 & 0062-0065) to determine whether to replace said subset of said broadcast meta data with local meta data (server 606 makes the determination based on the value in the OPT field 308) (¶ 0045, 0058, and 0065);

replacing said subset of said broadcast meta data with local meta data in response to a determination in the evaluating step to obtain a modified broadcast signal (¶ 0049 & 0065);

broadcasting the modified broadcast signal [609] (via transmission facilities 620 – figure 6) to the viewers [CPE 648] in a local market (¶ 0065 and 0057).

As for Claim 45, Del Sesto teaches wherein the substitution determination parameter [308] comprises a multi-level priority parameter (i.e., whether the content should be blocked, passed through, or replaced) and said local state comprises a local priority parameter (¶ 0045).

As for Claim 46, Del Sesto teaches wherein:

the generic meta data component further comprises content (¶ 0047); and

the local meta data comprises triggers and content (¶ 0061 and 0065).

As for Claim 47, Del Sesto discloses the method as set forth in claim 44, said method further comprising:

repeating the evaluation step (¶ 0060); and

broadcasting the broadcasting signal to the viewers in response to a determination in the repeated evaluating step to not make the insertion (§ 0058 and 0064).

As for Claim 48, Del Sesto teaches wherein the substitution determination parameter [308] comprises a geographic region identifier parameter (i.e., broadcast server 608 inserts a custom interactive content into the video signal 607 based on a determination of custom content broadcast suited to the demographics of the local subsystem 628) said local state comprises a geographic identifier (§ 0057 and 0045).

As for Claim 49, Del Sesto teaches the method as set forth in claim 44, said method further comprising: stripping the generic meta data component from the broadcast signal prior to the evaluating step (i.e., code detector 604 receives the video signal, detects the content code 300 and provides the code 300 to server 606 to be evaluated) (§ 0049).

As for Claim 50, Del Sesto teaches the method set forth in claim 49, said method further comprising:

repeating the evaluating step (§ 0060),

inserting the generic meta data component back into the broadcast signal in response to a determination in the repeated evaluating step to not make the insertion, to obtain a reconstructed broadcast signal (§ 0058 and 0064); and

broadcasting the reconstructed broadcast signal to viewers (§§ 0064).

Regarding Claim 56, Del Sesto discloses a system (figure 2) for controlling a display of enhanced television content for a first group of viewers, comprising:

a first distribution point (224 – figure 2) comprising:

a first broadcast signal receiver (212 – figure 2) for receiving a broadcast signal comprising a video component (200 – figure 2) and a first meta data component (interactive data via 201 – figure 2), the first meta data component comprising triggers and broadcast meta data (§§ 0028-0029);

a first local meta data center (244 – figure 2) for storing first local meta data of particular relevancy to a second group of viewers that include the first group of viewers (§§ 0033, 0043, and 0045);

a first data stripper (204 – figure 2) for extracting first meta data parameters (300 – figure 3) from the first meta data component wherein the extracted first meta data parameters include a first substitution determination parameter (OPT field 308 – figure 3, § 0045), said first substitution determination parameter specifying conditions (i.e., whether the content or “meta data” should be blocked, passed through, or replaced as set forth by interactive content preparer) when a subset of said broadcast meta data in said broadcast signal should be replaced (§§ 0030 and 0033);

a first processor component (206 – figure 2) coupled to the first broadcast signal receiver for evaluating the first substitution determination parameter with

respect to a local state to determine whether to replace said subset of said broadcast meta data in the broadcast signal (¶ 0033);

a second processor component (206 – figure 2) coupled to the first local meta data center (244 – figure 2) for selecting first local meta data (i.e., interactive content) in response to a signal from the first processor component [206] to make the replacement of said subset of said broadcast meta data (¶ 0033);

a first inserter (208 – figure 2) coupled to the second processor component [206] for receiving the first local meta data, and further coupled to the first broadcast signal receiver for replacing said subset of said broadcast meta data with the first local meta data to obtain a first modified broadcast signal (¶ 0033); and

a first transmitter (220 – figure 2) coupled to the first inserter [208] for broadcasting the first modified broadcast signal (¶ 0033); and

a second distribution point (628 – figure 6) comprising:

a second broadcast signal receiver (612 – figure 6) for receiving the first modified broadcast signal (601 – figure 6) from the first transmitter [220], the first modified broadcast signal comprising the video component and the first local meta data component (¶ 0047);

a second local meta data center (644 – figure 6) for storing second local meta data of particular relevancy to the first group of viewers (¶ 0065);

a second data stripper (604 – figure 6) for extracting second meta data parameters (300 – figure 3) from the first meta data component wherein the extracted second meta data parameters include a second substitution determination parameter (OPT field 308 – figure 3, ¶ 0045), said second substitution determination parameter specifying conditions (i.e., whether the content or “meta data” should be blocked, passed through, or replaced as set forth by interactive content preparer) when a subset of said first local meta data in said first modified broadcast signal should be replaced (¶ 0045 and 0058);

a third processor component (606 – figure 6) coupled to the second broadcast signal receiver for evaluating the second substitution determination parameter [308] with respect to a local state (i.e., server 606 determines whether the subsystem 628 requires an application to be blocked ¶ 0060 & 0062) to determine whether to replace said subset of said first local meta data in the broadcast signal (¶ 0062-0065 and 0056-0058);

a fourth processor component (606 – figure 6) coupled to the second local meta data center [644] for selecting second local meta data (i.e., local customized application) in response to a signal from the third processor component to make the replacement of said subset of said first local meta data (¶ 0065);

a second inserter (608 – figure 6) coupled to the fourth processor component [606] for receiving the second local meta data, and further coupled to the second broadcast signal receiver for replacing said subset of said first meta



data with the second local meta data to obtain a second modified broadcast signal (§ 0049 and 0065); and  
a second transmitter (620 – figure 6) coupled to the second inserter [608] for broadcasting the second modified broadcast signal (611 – figure 6) to the first group of viewers (648 – figure 6) (§ 0049 and 0065).

***Claim Rejections - 35 USC § 103***

20. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

21. Claims 5-7, 15, 16, 20, 21, 24, 26, 34, and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Del Sesto.

As for Claims 5-7, Del Sesto discloses the device of claim 1, but fails to disclose that the incoming data terminal is adapted to receive a data signal that conforms to a TCP/IP standard, an ATVEF standard, and a DOCSIS standard. However, Official notice is taken of the fact that it is well known in the art to adapt a data terminal of a broadcast headend to receive a data signal conforming to a TCP/IP standard, for the purposes of enabling communication with TCP/IP devices; an ATVEF standard, for the purposes of enabling communication with enhanced television devices; and a DOCSIS standard, for the purposes of enabling communication with DOCSIS devices, respectively. Accordingly, it would have been obvious to one of ordinary skill in the art at

the time the invention was made to modify the incoming data terminal of Del Sesto to receive a data signal that conforms to a TCP/IP standard, an ATVEF standard, and a DOCSIS standard, for the purpose of enabling communication with any well known standard such as TCP/IP devices, ATVEF devices, and DOCSIS devices in order to provide compatibility with any interactive television system.

As for Claims 15 and 16, Del Sesto discloses the data modification device of claim 14, but fails to specifically disclose wherein the storage device is a recordable disk or a RAM. The examiner gives Official Notice that it is notoriously well known in the art to employ recordable disks and memory devices such as RAM to store data on for retrieval by a processor. Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Del Sesto to include wherein the storage device is a recordable disk or RAM for the purpose of storing large amounts of data in a reliable computer media.

As for Claims 20, 21, 34, and 35, Del Sesto discloses the device of claim 2 and the method of claim 31, but fails to disclose wherein the processor is a reprogrammable device or an ASIC. Official notice is taken of the fact that it is well known in the art to implement a processor as a reprogrammable device, for the purpose of increasing system flexibility; and to implement a processor as an ASIC, for the purpose of improving device efficiency by using a processor designed for a specific application. Accordingly, it would have been obvious to one of ordinary skill in the art at the time the

invention was made to implement the processor of Del Sesto as a reprogrammable device, for the purpose of increasing system flexibility; and to implement a processor as an ASIC, for the purpose of improving device efficiency by using a processor designed for a specific application in the cable headend.

As for Claims 24 and 26, Del Sesto disclose the device of claim 22, but fail to disclose the receiver is an HDTV enabled television and a DVD enabled television. Official notice is taken of the fact that it is well known in the art to implement a receiver: as an HDTV enabled television, thus enabling high-definition content to be viewed by the user; and a DVD enabled television, thus enabling compatibility with programming provided in DVD format. Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the receiver of Del Sesto to include an HDTV enabled television and a DVD enabled television, for the benefit of enabling compatibility with programming provided in NTSC format, HDTV format, MPEG-2 format, DVD format, and DBS format.

22. Claims 4, 8-13, 36, 51, and 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Del Sesto in view of Kalluri et al. "Kalluri (USPN 5,937,331) [of record].

As for Claim 4, Del Sesto discloses substitution determination parameter [308] allows a content provider to control whether interactive content or "meta data" can be replaced or whether certain interactive content or "meta data" can not be replaced or

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modified by the local subsystem 628. Del Sesto however is silent on disclosing OPT filed 308 comprising a unique identifier for said data modification device.

In an analogous art, Kalluri discloses transmitting a trigger 200 or “meta data” from remote network 10 to broadcast station 50, wherein the trigger 200 comprises a unique identifier (i.e., unit address field 210) for the data modification device (Col. 6, lines 18-56). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the data modification device of Del Sesto to include wherein the substitution parameter comprises a unique identifier for said data modification device as taught by Kalluri for the benefit of directing local subsystems on the protocols of replacing or inserting interactive content.

As for Claim 8, Del Sesto and Kalluri disclose, in particular Del Sesto teaches wherein the broadcasting source is an NTSC format (§ 0029).

As for Claim 9, Del Sesto and Kalluri disclose, Del Sesto teaches wherein the broadcasting source is an MPEG2 format (§ 0029 and 0051).

As for Claims 10-12, Del Sesto and Kalluri disclose the device of claim 4, but fail to disclose the broadcasting source is an HDTV format, a DVD format, and a DBS format. Official notice is taken of the fact that it is well known in the art to employ a broadcasting source of an HDTV format, for enabling communication with HDTV compatible devices; a DVD format, enabling communication with DVD compatible

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devices; and a DBS format, for enabling communication with DBS compatible devices. Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the broadcasting source of Del Sesto and Kalluri to include an HDTV format, a DVD format, and a DBS format, for the purpose conserving transmission bandwidth and enabling communication with HDTV, DVD, and DBS compatible devices in an interactive television system.

As for Claim 13, Del Sesto and Kalluri disclose, in particular Del Sesto teaches wherein the data signal comprises a video data component and a meta data component (¶ 0047).

As for Claim 36, Del Sesto discloses substitution determination parameter [308] allows a content provider to control whether interactive content or "meta data" can be replaced or whether certain interactive content or "meta data" can not be replaced or modified by the local subsystem 628. Del Sesto however is silent on disclosing OPT filed 308 comprising a unique identifier for said data modification device.

In an analogous art, Kalluri discloses transmitting a trigger 200 or "meta data" from remote network 10 to broadcast station 50, wherein the trigger 200 comprises a unique identifier (i.e., unit address field 210) for the data modification device (Col. 6, lines 18-56). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Del Sesto to include wherein the substitution parameter comprises a unique identifier for said data modification

device as taught by Kalluri for the benefit of directing local subsystems on the protocols of replacing or inserting interactive content.

As for Claim 51, Del Sesto discloses substitution determination parameter [308] allows a content provider to control whether interactive content or "meta data" can be replaced or whether certain interactive content or "meta data" can not be replaced or modified by the local subsystem 628. Del Sesto however is silent on disclosing OPT filed 308 comprising a unique identifier for said data modification device.

In an analogous art, Kalluri discloses transmitting a trigger 200 or "meta data" from remote network 10 to broadcast station 50, wherein the trigger 200 comprises a unique identifier (i.e., unit address field 210) and the local state (program source 58) comprises a unique identifier for a machine implementing said method (Col. 6, lines 18-56). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Del Sesto to include wherein the substitution parameter comprises a unique identifier and said local state comprises a unique identifier for a machine implementing said method as taught by Kalluri for the benefit of directing local subsystems on the protocols of replacing or inserting interactive content.

As for Claim 52, Del Sesto and Kalluri discloses the method of claim 51, but fail to disclose the generic parameters and the local parameters are defined by options established by an Advanced Television Enhancement Forum specification.

Official notice is taken of the fact that it is well known in the art to define enhanced television content according to an ATVEF specification, for the benefit of ensuring compatibility with ATVEF devices.

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Del Sesto and Kalluri to include the generic parameters and the local parameters are defined by options established by an Advanced Television Enhancement Forum specification, for the benefit of ensuring compatibility with ATVEF devices.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHRIS PARRY whose telephone number is (571) 272-8328. The examiner can normally be reached on Monday through Friday, 8:00 AM EST to 4:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Grant can be reached on (571) 272-7294. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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